

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P400494

Luminaire Tested: **ARCH-L-PA3-90-727-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400494  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-90-727-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9368 lumens  
Efficiency: N/A  
Efficacy: 100.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G3

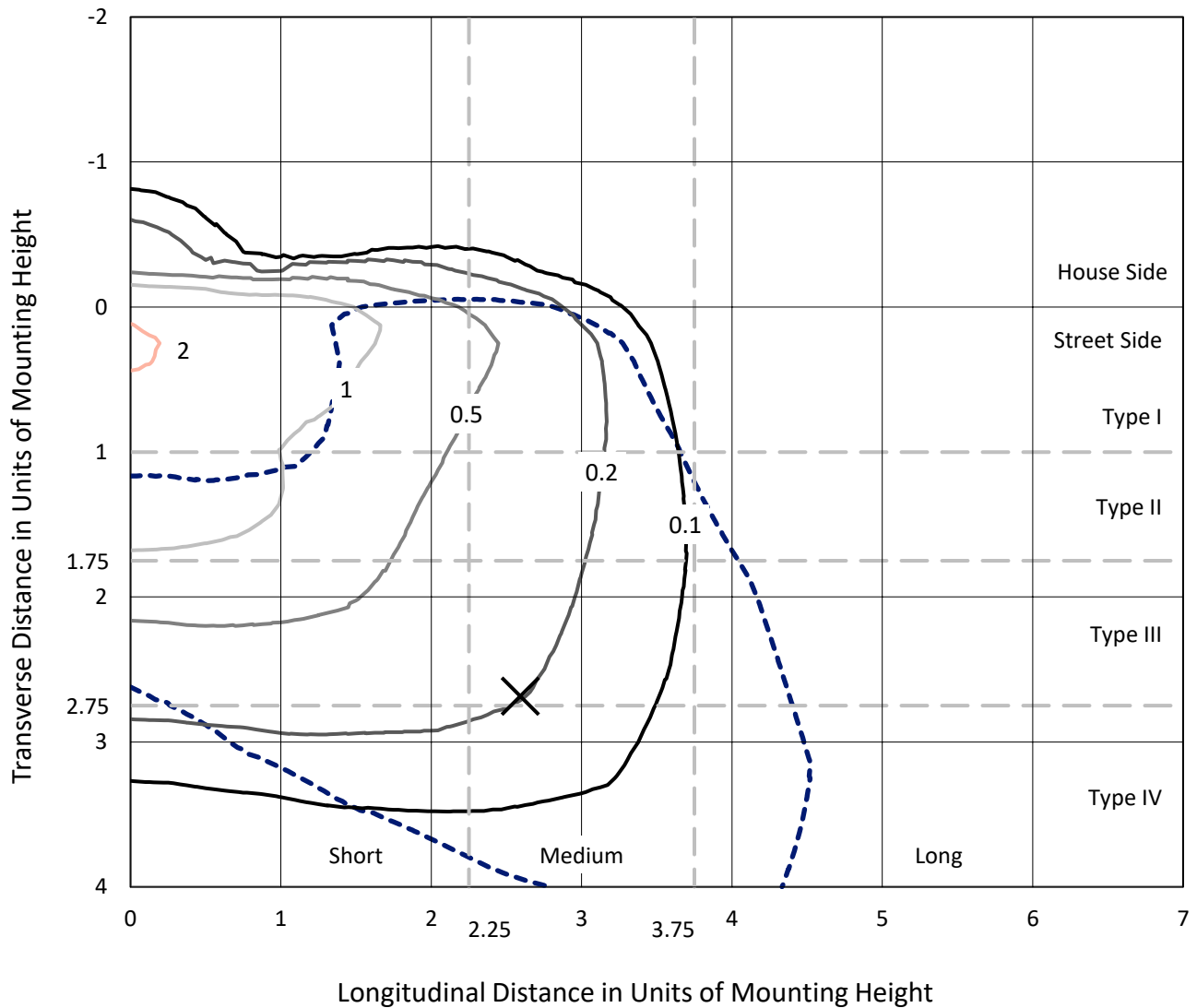
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

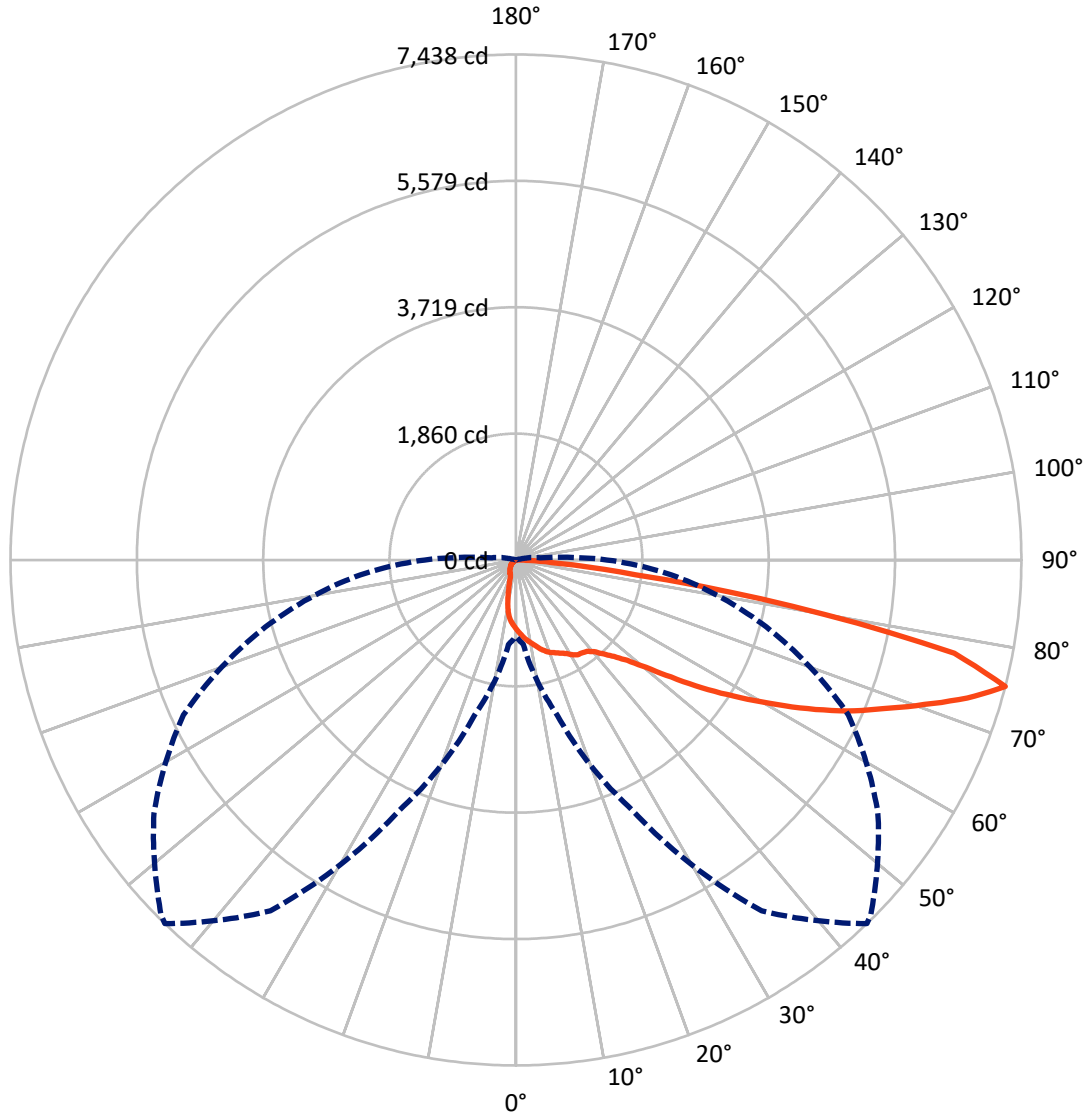
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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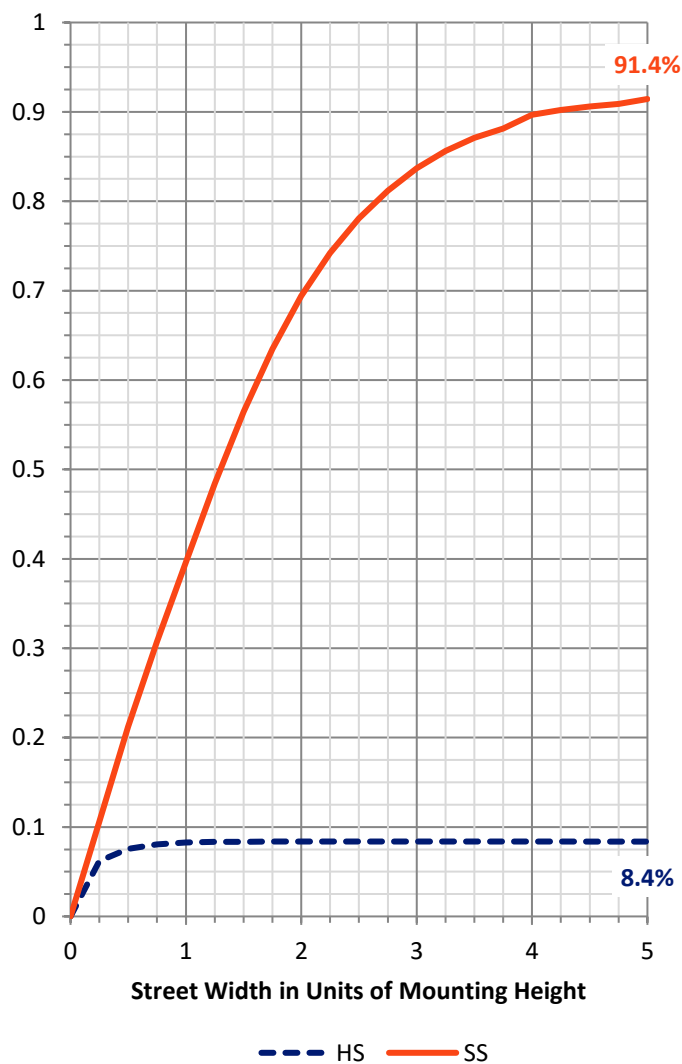
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	790.0	0.0	790.0
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	8578.0	0.0	8578.0
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	9368.0	0.0	9368.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.2	1.0
10°-20°	269.5	2.9
20°-30°	444.7	4.7
30°-40°	645.4	6.9
40°-50°	1049.2	11.2
50°-60°	1849.5	19.7
60°-70°	2658.2	28.4
70°-80°	2128.6	22.7
80°-90°	226.8	2.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	9368.0	100.0
0°-180°	9368.0	100.0

**Coefficient of Utilization**



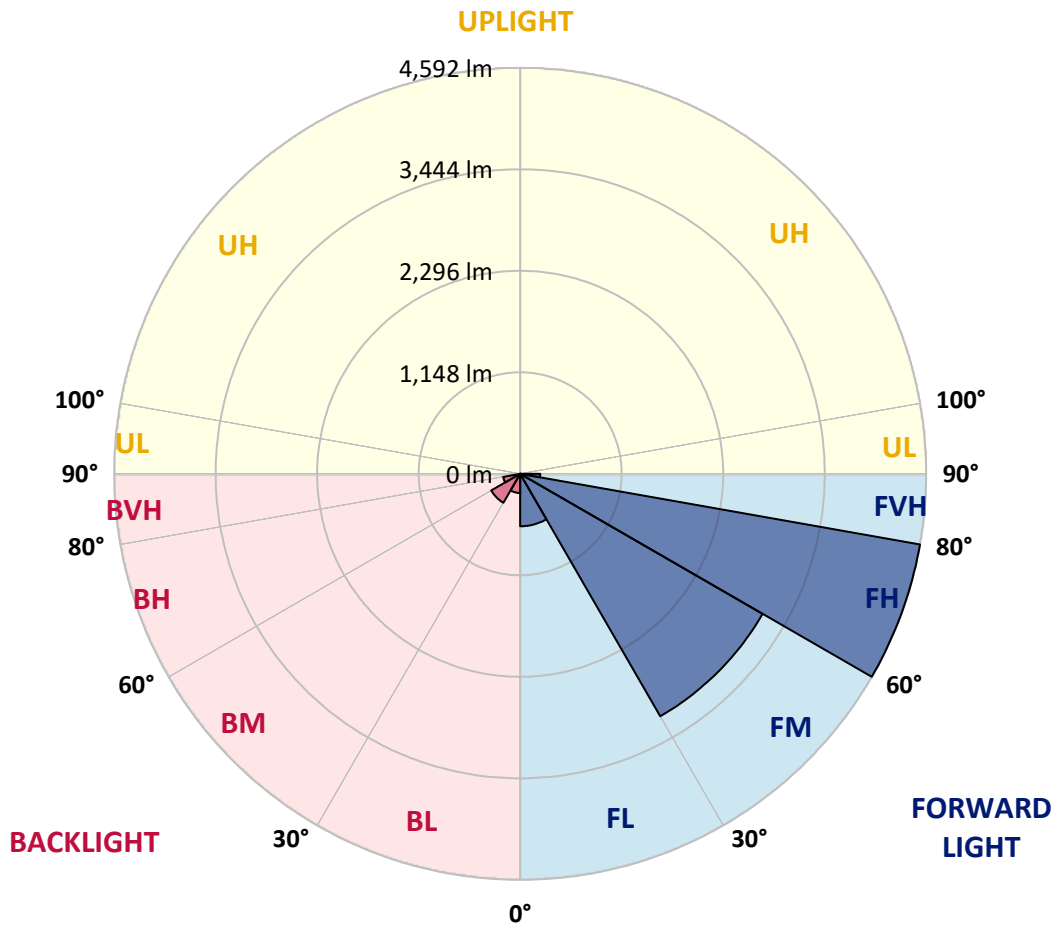
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	593.3	6.3			
FM (30°-60°)	3166.5	33.8			
FH (60°-80°)	4592.0	49.0			G2/5000
FVH (80°-90°)	226.2	2.4			G3/500
BL (0°-30°)	217.0	2.3	B1/500		
BM (30°-60°)	377.6	4.0	B1/1000		
BH (60°-80°)	194.8	2.1	B1/500		G1/500
BVH (80°-90°)	0.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1019.7	1019.7	1019.7	1019.7	1019.7	1019.7	1019.7	1019.7	1019.7	1019.7	1019.7
2.5°	1111.3	1109.5	1104.4	1095.7	1087.1	1078.4	1076.7	1062.9	1047.3	1035.2	1024.9
5°	1209.8	1208.1	1199.4	1180.4	1161.4	1138.9	1137.2	1104.4	1075.0	1042.1	1014.5
7.5°	1311.7	1308.3	1292.7	1263.4	1230.5	1196.0	1192.5	1144.1	1100.9	1057.7	1017.9
10°	1391.2	1387.8	1365.3	1330.8	1285.8	1242.6	1237.4	1187.3	1144.1	1088.8	1035.2
12.5°	1469.0	1462.1	1432.7	1394.7	1339.4	1297.9	1292.7	1240.9	1189.0	1132.0	1066.3
15°	1541.6	1533.0	1505.3	1456.9	1398.2	1358.4	1355.0	1299.6	1246.1	1180.4	1107.8
17.5°	1591.7	1588.3	1555.4	1501.9	1444.8	1412.0	1408.5	1351.5	1297.9	1228.8	1151.0
20°	1617.6	1617.6	1586.5	1527.8	1475.9	1453.5	1448.3	1394.7	1342.9	1277.2	1196.0
22.5°	1622.8	1628.0	1603.8	1539.9	1501.9	1482.8	1479.4	1432.7	1382.6	1322.1	1246.1
25°	1633.2	1633.2	1621.1	1552.0	1524.3	1519.1	1517.4	1475.9	1431.0	1370.5	1296.2
27.5°	1645.3	1645.3	1636.7	1569.3	1558.9	1557.2	1555.4	1536.4	1500.1	1429.3	1355.0
30°	1676.4	1678.1	1671.2	1603.8	1596.9	1615.9	1619.4	1609.0	1564.1	1475.9	1415.4
32.5°	1754.2	1738.6	1719.6	1628.0	1640.1	1664.3	1666.0	1645.3	1596.9	1526.1	1488.0
35°	1949.5	1857.9	1771.5	1648.8	1653.9	1678.1	1681.6	1679.9	1650.5	1590.0	1571.0
37.5°	2130.9	2001.3	1878.6	1697.1	1679.9	1705.8	1712.7	1742.1	1719.6	1678.1	1683.3
40°	2236.4	2186.2	2099.8	1830.2	1731.7	1771.5	1778.4	1823.3	1814.7	1797.4	1830.2
42.5°	2561.3	2564.7	2471.4	2029.0	1826.8	1890.7	1899.4	1935.6	1947.7	1956.4	2035.9
45°	2938.0	2950.1	2927.7	2386.7	2006.5	2027.2	2039.3	2087.7	2132.7	2188.0	2333.1
47.5°	3390.8	3380.5	3297.5	2824.0	2319.3	2203.5	2212.2	2305.5	2383.3	2504.2	2711.6
50°	3791.8	3817.7	3660.4	3231.8	2760.0	2481.8	2473.1	2564.7	2704.7	2874.1	3135.1
52.5°	4196.2	4158.2	3945.6	3636.3	3282.0	2860.3	2834.3	2884.5	3081.5	3282.0	3549.8
55°	4303.4	4306.8	4234.2	4078.7	3717.5	3320.0	3276.8	3273.3	3518.7	3655.3	3985.4
57.5°	4514.2	4522.8	4540.1	4571.2	4400.1	3779.7	3734.8	3686.4	3924.9	4004.4	4422.6
60°	4728.5	4738.9	4844.3	5011.9	4897.9	4275.7	4227.3	4113.3	4246.3	4353.5	4882.3
62.5°	4700.9	4773.4	5079.3	5412.9	5399.1	4820.1	4759.6	4484.8	4569.5	4662.8	5304.0
65°	4244.6	4322.4	5010.2	5523.5	5902.0	5357.6	5259.1	4868.5	4873.7	4986.0	5710.2
67.5°	3836.7	3921.4	4578.2	5476.8	6233.8	5839.8	5737.8	5253.9	5172.7	5359.3	5927.9
70°	3601.7	3686.4	4234.2	5331.7	6327.1	6373.8	6285.7	5694.6	5528.7	5699.8	5684.2
72.5°	2818.8	2951.9	3795.3	5055.1	6427.4	6945.9	6876.7	6252.8	5831.1	5343.8	4327.6
75°	1123.4	1246.1	2369.4	4068.3	6301.2	7438.4	7384.8	6503.4	5397.3	3816.0	2215.6
77.5°	338.7	362.9	658.5	2011.7	4619.6	6595.0	6577.7	5468.2	3819.4	1771.5	604.9
80°	112.3	124.4	202.2	554.8	2108.5	4120.2	4197.9	3484.2	1735.2	406.1	122.7
82.5°	46.7	51.8	102.0	222.9	746.6	1774.9	1749.0	1560.6	604.9	252.3	44.9
85°	12.1	15.6	46.7	127.9	273.1	611.8	642.9	523.7	342.2	209.1	13.8
87.5°	0.0	0.0	22.5	51.8	122.7	184.9	193.6	159.0	193.6	157.3	6.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1019.7	1019.7	1019.7	1019.7	1019.7	1019.7	1019.7	1019.7	1019.7	1019.7	1019.7
2.5°	1016.2	1007.6	992.0	981.6	967.8	964.4	957.5	948.8	947.1	938.4	940.2
5°	998.9	985.1	957.5	938.4	916.0	909.1	897.0	888.3	881.4	869.3	871.0
7.5°	995.5	974.7	936.7	900.4	864.1	838.2	801.9	772.5	748.3	722.4	727.6
10°	1007.6	981.6	928.1	878.0	812.3	729.3	634.3	572.1	540.9	509.8	513.3
12.5°	1031.8	1000.7	931.5	855.5	722.4	580.7	449.3	364.7	342.2	328.4	330.1
15°	1068.1	1030.0	941.9	812.3	601.4	420.0	299.0	262.7	271.3	276.5	276.5
17.5°	1106.1	1062.9	950.5	734.5	464.9	293.8	243.7	240.2	252.3	264.4	264.4
20°	1152.7	1097.4	952.3	636.0	335.3	238.5	229.9	229.9	238.5	252.3	252.3
22.5°	1197.7	1135.5	936.7	523.7	255.8	221.2	221.2	221.2	226.4	240.2	242.0
25°	1251.3	1182.1	903.9	404.4	219.5	210.8	210.8	212.6	216.0	228.1	229.9
27.5°	1308.3	1230.5	848.6	295.5	200.5	198.7	200.5	202.2	203.9	216.0	219.5
30°	1374.0	1284.1	777.7	221.2	183.2	183.2	188.4	191.8	191.8	202.2	205.7
32.5°	1450.0	1355.0	693.0	183.2	165.9	164.2	172.8	178.0	178.0	186.7	190.1
35°	1545.1	1427.5	591.1	162.5	152.1	148.6	152.1	160.7	164.2	171.1	172.8
37.5°	1671.2	1514.0	482.2	150.4	141.7	134.8	134.8	136.5	143.4	150.4	152.1
40°	1832.0	1609.0	375.0	141.7	131.3	124.4	119.2	117.5	115.8	121.0	124.4
42.5°	2034.2	1716.2	280.0	133.1	122.7	112.3	105.4	98.5	89.9	88.1	89.9
45°	2293.4	1847.5	207.4	126.2	117.5	102.0	89.9	77.8	62.2	57.0	58.8
47.5°	2599.3	1984.0	162.5	119.2	114.1	89.9	74.3	53.6	38.0	34.6	36.3
50°	2924.2	2115.4	138.3	110.6	107.2	77.8	53.6	32.8	22.5	22.5	24.2
52.5°	3200.7	2189.7	126.2	103.7	96.8	63.9	34.6	19.0	13.8	13.8	15.6
55°	3468.6	2229.5	117.5	96.8	83.0	44.9	19.0	12.1	8.6	8.6	8.6
57.5°	3745.1	2246.7	107.2	88.1	65.7	27.7	10.4	6.9	5.2	5.2	5.2
60°	3990.5	2213.9	91.6	72.6	43.2	13.8	5.2	5.2	3.5	1.7	1.7
62.5°	4196.2	2151.7	63.9	51.8	25.9	6.9	3.5	1.7	0.0	0.0	0.0
65°	4322.4	2051.4	41.5	34.6	15.6	5.2	1.7	0.0	0.0	0.0	0.0
67.5°	4286.1	1863.1	25.9	22.5	6.9	3.5	1.7	0.0	0.0	0.0	0.0
70°	3867.8	1527.8	19.0	13.8	5.2	1.7	0.0	0.0	0.0	0.0	0.0
72.5°	2787.7	1033.5	13.8	8.6	3.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	1341.1	368.1	8.6	6.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	328.4	81.2	5.2	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	72.6	15.6	3.5	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	24.2	6.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.6	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)